

APPENDICES

APPENDIX A

Soil Boring Logs and Well Completion Details

ENVIRON

USCS SOIL CLASSIFICATION CHART

	(GW) Well Graded Gravel; Well Graded Gravel with sand		(SP) Poorly Graded Sand with gravel		(GM) Silty Gravels
	(GP) Poorly Graded Gravel; Poorly Graded Gravel with sand		(SW) Well Graded Sand with gravel		(GC) Clayey Gravels
	(SW) Well Graded Sand		(SM) Silty Sand		(SC) Clayey Sand
	(SP) Poorly Graded Sand		(SP-SM) Poorly Graded Sand with silt		(SP-SC) Sand with Clay
	(ML) Silt; Silt with sand		(ML) Sandy Silt		(ML) Gravelly Silt
	(CL) Clay; Clay with sand		(CL) Sandy Clay		(CL) Gravelly Clay
	(ML/SM) Sandy Silt/Silty Sand				

WELL CONSTRUCTION SYMBOLS KEY

	Concrete		End Cap
	Cement/Bentonite Grout		Natural Fill/Slough
	Bentonite Chips		
	Screened Interval in Filter Pack		

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-1**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/26/2007**

Well Construction Details

Blank Casing (feet):	0 to 17	4-inch Sch. 40 PVC
Screen (feet):	17 to 37	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 13	Bentonite Grout
	13 to 15	Bentonite Pellets
	15 to 37.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **189.325 ft. MSL**

Northing: **1914308.71**



Easting: **6182409.26**



Total Depth: **37.5 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					CLAYEY SILT with sand (ML), DARK YELLOWISH BROWN (10YR 4/6); moist, low plasticity with medium toughness by hand roll test, large concrete debris, trace organics (0% gravel, 15% sand, 85% fines).	
3						
4						
5						
6					SANDY SILT (ML), DARK YELLOWISH BROWN (10YR 4/6); moist, very fine to fine sand (0% gravel, 50% sand, 50% fines).	
7			EW-1-6.5-7.0			
8					SILT with sand (ML), DARK YELLOWISH BROWN (10YR 4/6); moist, trace gravel (0.25" maximum diameter) (0% gravel, 20% sand, 80% fines).	
9						
10			EW-1-10.0-10.5		SILTY CLAY (CL), OLIVE BROWN (2.5Y 4/3); moist, mottled with iron oxide staining (0% gravel, 10% sand, 90% fines).	
11						
12						
13						
14						
15						
16						
17						
18						
19						

Sample Graphics

 Hand Auger
 No Recovery

 Soil Sample for Physical Testing
 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-1**



Project No.: **03-11903E**



Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/26/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22			EW-1-21.5-22.0		SANDY CLAY (CL), DARK YELLOWISH BROWN (10YR 4/3); moist, very fine to fine sand (0% gravel, 40% sand, 60% fines).	
23					SILTY CLAY (CL), OLIVE BROWN (2.5Y 4/3); moist, mottled with iron oxide staining (0% gravel, 10% sand, 90% fines).	
24						
25					SANDY CLAYEY SILT (ML), DARK OLIVE BROWN (2.5Y 3/3); moist (0% gravel, 35% sand, 65% fines).	
26						
27					At 26.5 feet bgs: saturated.	
28					SILTY CLAY (CL), DARK GRAYISH BROWN (2.5YR 4/2); soft, moist, iron oxide staining (0% gravel, 5% sand, 95% fines).	
29						
30						
31						
32			EW-1-32.0-32.5		SILTY FINE SAND (SM), VERY DARK GRAYISH BROWN (10YR 3/2); saturated (0% gravel, 75% sand, 25% fines).	
33						
34					SILTY CLAY (CL), DARK GRAY (10YR 4/1); moist, iron oxide staining, medium plasticity and toughness by hand roll test (0% gravel, 5% sand, 95% fines).	
35						
36						
37			EW-1-37.0-37.5			
38					End of boring at 37.5 feet bgs.	
39					Extraction well installed 4/26/2007.	
40						
41						
42						
43						
44						
45						
46						

Sample Graphics

 Hand Auger
 No Recovery

 Soil Sample for Physical Testing
 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-2**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/24/2007**

Well Construction Details

Blank Casing (feet):	0 to 17	4-inch Sch. 40 PVC
Screen (feet):	17 to 37	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 13	Bentonite Grout
	13 to 15	Bentonite Pellets
	15 to 37.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **187.915 ft. MSL**

Northing: **1914333.35**

Easting: **6182435.10**

Total Depth: **39.0 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					CLAYEY SILT with sand (ML), DARK YELLOWISH BROWN (10YR 4/4); moist, fine sand, trace gravel and organics (0% gravel, 20% sand, 80% fines).	
3						
4						
5					At 5.0 feet: increasing gravel.	
6					SANDY SILT (ML), DARK YELLOWISH BROWN (10YR 4/4); moist, very fine to fine sand (0% gravel, 50% sand, 50% fines).	
7						
8						
9					CLAYEY SILT (ML), DARK YELLOWISH BROWN (10YR 4/4); moist, iron oxide staining, low plasticity and toughness by hand roll test, very fine sand (0% gravel, 5% sand, 95% fines).	
10						
11						
12					SILTY CLAY (CL), GRAYISH BROWN (2.5Y 5/2); moist, mottled with iron oxide staining (0% gravel, 10% sand, 90% fines).	
13						
14						
15						
16					CLAYEY SILT with sand (ML), OLIVE BROWN (2.5Y 4/3); moist, low plasticity with low toughness by hand roll test, very fine to fine sand (0% gravel, 25% sand, 75% fines).	
17						
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-2**

Project No.: **03-11903E**

Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/24/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22						
23						
24						
25					CLAYEY SILT (ML), DARK OLIVE BROWN (2.5Y 3/3); soft, saturated (0% gravel, 10% sand, 90% fines).	
26						
27					SILTY CLAY (CL), DARK GRAYISH BROWN (10YR 4/2); moist, variegated staining, medium plasticity and toughness by hand roll test (0% gravel, 0% sand, 100% fines).	
28						
29						
30						
31					SAND with silt (SP-SM), VERY DARK BROWN (10YR 2/2); saturated (0% gravel, 85% sand, 15% fines).	
32						
33					SILTY CLAY (CL), DARK GRAYISH BROWN (10YR 4/3); moist (0% gravel, 5% sand, 95% fines).	
34						
35						
36						
37						
38					SANDY SILT (ML), DARK BROWN (10YR 3/3); moist, very fine to fine sand (0% gravel, 35% sand, 65% fines).	
39						
40					End of boring at 39.0 feet bgs.	
41					Extraction well installed 4/24/2007.	
42						
43						
44						
45						
46						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-3**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/27/2007**

Well Construction Details

Blank Casing (feet):	0 to 16	4-inch Sch. 40 PVC
Screen (feet):	16 to 36	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 12	Bentonite Grout
	12 to 14	Bentonite Pellets
	14 to 36.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **188.375 ft. MSL**

Northing: **1914357.35**

Easting: **6182460.09**

Total Depth: **36.5 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					SILTY CLAY with sand (CL), OLIVE BROWN (2.5Y 4/4); moist, very fine sand, trace gravel (0% gravel, 15% sand, 85% fines).	
3						
4						
5						
6						
7					SILTY SAND (SM), DARK OLIVE BROWN (2.5Y 3/3); moist, very fine to fine sand (5% gravel, 75% sand, 20% fines).	
8						
9						
10					SILTY CLAY (CL), DARK YELLOWISH BROWN (10YR 4/6); moist, variegated staining, trace gravel (0.25" maximum diameter) (0% gravel, 10% sand, 90% fines).	
11						
12						
13						
14						
15						
16					SILTY CLAY (CL), OLIVE BROWN (2.5Y 4/3); moist, mottled with iron oxide staining (0% gravel, 5% sand, 95% fines).	
17						
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-3**

Project No.: **03-11903E**

Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/27/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22						
23					SANDY SILT to SILTY SAND (ML/SM), DARK YELLOWISH BROWN (10YR 4/3); moist, very fine to fine sand (0% gravel, 40% sand, 60% fines).	
24						
25					SILTY CLAY (CL), DARK GRAYISH BROWN (10YR 4/2); moist, mottled with iron oxide staining (0% gravel, 0% sand, 100% fines).	
26						
27						
28						
29						
30						
31					SILTY SAND (SM), OLIVE BROWN (2.5Y 4/4); saturated, very fine to medium sand (0% gravel, 65% sand, 35% fines).	
32						
33					SILTY CLAY (CL), DARK GRAYISH BROWN (2.5Y 4/2); moist, iron oxide staining, medium plasticity and toughness by hand roll test (0% gravel, 0% sand, 100% fines).	
34						
35						
36						
37					End of boring at 36.5 feet bgs.	
38					Extraction well installed 4/27/2007.	
39						
40						
41						
42						
43						
44						
45						
46						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-4**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/24/2007**

Well Construction Details

Blank Casing (feet):	0 to 17	4-inch Sch. 40 PVC
Screen (feet):	17 to 37	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 13	Bentonite Grout
	13 to 15	Bentonite Pellets
	15 to 37.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **190.535 ft. MSL**

Northing: **1914271.98**

Easting: **6182420.92**

Total Depth: **40.0 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					CLAYEY SILT (ML), DARK BROWN (10YR 3/3); moist, low to medium plasticity with medium toughness by hand roll test, trace gravel (maximum length 1.0") (0% gravel, 10% sand, 90% fines).	
3						
4						
5						
6						
7						
8					SANDY SILT (ML/SM), BROWN (10YR 4/3); moist, very fine to fine sand (0% gravel, 40% sand, 60% fines).	
9						
10						
11						
12					SILTY CLAY (CL), GRAYISH BROWN (2.5Y 5/2); moist, meduim plasticity and toughness by hand roll test (0% gravel, 15% sand, 85% fines).	
13						
14					SANDY SILT (ML), OLIVE BROWN (2.5Y 4/4); moist (0% gravel, 35% sand, 65% fines).	
15						
16						
17					SILTY CLAY (CL), GRAYISH BROWN (2.5Y 5/2); moist, low to medium plasticity, variegated staining (0% gravel, 5% sand, 95% fines).	
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-4**

Project No.: **03-11903E**

Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/24/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22						
23						
24					SANDY SILT (ML), OLIVE BROWN (2.5Y 4/3); moist (0% gravel, 25% sand, 75% fines).	
25					CLAYEY SILT (ML), DARK YELLOWISH BROWN (10YR 3/4); moist, very fine sand (0% gravel, 10% sand, 90% fines).	
26					SANDY SILT (ML), DARK YELLOWISH BROWN (10YR 3/4); moist, soft, iron oxide staining, very fine sand (0% gravel, 25% sand, 75% fines).	
27						
28						
29						
30					SILTY CLAY with sand (CL), DARK GRAYISH BROWN (2.5Y 4/2); moist (0% gravel, 25% sand, 75% fines).	
31					At 31.0 feet bgs: saturated.	
32						
33					SAND with silt (SP-SM), VERY DARK BROWN (10YR 2/2); saturated (0% gravel, 90% sand, 10% fines).	
34						
35						
36					SILTY CLAY (CL), OLIVE BROWN (2.5Y 4/3); moist, iron oxide staining, meduim plasticity with high toughness by hand roll test (0% gravel, 0% sand, 100% fines).	
37						
38						
39						
40						
41					End of boring at 40.0 feet bgs.	
42					Extraction well installed 4/24/2007.	
43						
44						
45						
46						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-5**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/27/2007**

Well Construction Details

Blank Casing (feet):	0 to 16.5	4-inch Sch. 40 PVC
Screen (feet):	16.5 to 36.5	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 12.5	Bentonite Grout
	12.5 to 14.5	Bentonite Pellets
	14.5 to 37	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **188.985 ft. MSL**

Northing: **1914295.01**

Easting: **6182446.29**

Total Depth: **38.0 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					CLAYEY SILT with sand (ML), DARK YELLOWISH BROWN (10YR 4/4); moist, very fine sand, trace gravel (0% gravel, 25% sand, 75% fines).	
3						
4					SANDY SILT (SC-SM), DARK YELLOWISH BROWN (10YR 4/6); moist, very fine to fine sand (0% gravel, 30% sand, 80% fines).	
5						
6						
7						
8					SILT with sand (ML), OLIVE BROWN (2.5Y 4/4); moist (0% gravel, 25% sand, 75% fines).	
9						
10						
11						
12					SILTY CLAY (CL), DARK GRAYISH BROWN (2.5Y 4/2); moist, mottled with iron oxide staining, low to medium plasticity with low toughness by hand roll test (0% gravel, 10% sand, 90% fines).	
13						
14						
15						
16						
17						
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-5**

Project No.: **03-11903E**

Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/27/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22						
23					SILTY CLAY (CL), OLIVE BROWN (2.5Y 4/3); moist, mottled with iron oxide staining (0% gravel, 10% sand, 90% fines).	
24						
25						
26						
27						
28						
29						
30					CLAYEY SILT (ML), DARK OLIVE BROWN (2.5Y 3/3); saturated, very fine sand (0% gravel, 10% sand, 90% fines).	
31						
32						
33					SILTY SAND (SM), VERY DARK BROWN (10YR 2/2); saturated (0% gravel, 85% sand, 15% fines).	
34					At 33 feet: thin grey laminae.	
35					SILTY CLAY (CL), VERY DARK GRAY (2.5Y 3/1); moist (0% gravel, 0% sand, 100% fines).	
36						
37					SILTY CLAY (CL), DARK GRAY (10YR 4/1); moist, iron oxide staining, medium plasticity and toughness by hand roll test (0% gravel, 0% sand, 100% fines).	
38						
39					End of boring at 38.0 feet bgs.	
40					Extraction well installed 4/27/2007.	
41						
42						
43						
44						
45						
46						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-6**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/24/2007**

Well Construction Details

Blank Casing (feet):	0 to 17	4-inch Sch. 40 PVC
Screen (feet):	17 to 37	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 13	Bentonite Grout
	13 to 15	Bentonite Pellets
	15 to 37.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **188.915 ft. MSL**

Northing: **1914320.22**

Easting: **6182471.74**

Total Depth: **37.5 feet**


Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL)	
2					CLAYEY SILT (ML), DARK YELLOWISH BROWN (10YR 4/6); moist, low plasticity with medium toughness by hand roll test, trace organics (0% gravel, 15% sand, 85% fines).	
3					From 2.5 to 5.0 feet: concrete debris.	
4						
5					SANDY SILT (ML/SM), DARK YELLOWISH BROWN (10YR 4/6); moist, very fine to fine sand (0% gravel, 40% sand, 60% fines).	
6						
7						
8						
9						
10						
11					SANDY SILT (ML), OLIVE BROWN (2.5Y 4/4); moist (0% gravel, 30% sand, 70% fines).	
12						
13					SILT with sand (ML), BROWN (10YR 4/3); moist, very fine to fine sand (0% gravel, 20% sand, 80% fines).	
14						
15						
16						
17						
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Soil Sample for Physical Testing

 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring No.: **EW-6**



Project No.: **03-11903E**



Project Name: **Hitachi GST,
San Jose, California**

Date(s): **4/24/2007**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
21						
22					SANDY SILT (ML\SM), BROWN (10YR 4/3); moist, very fine to fine sand (0% gravel, 40% sand, 60% fines).	
23					At 22.8 feet: saturated.	
24						
25						
26						
27					SILTY SAND (SM), DARK OLIVE BROWN (2.5Y 3/3); saturated (0% gravel, 85% sand, 15% fines).	
28						
29					SILTY CLAY (CL), DARK GRAYISH BROWN (2.5YR 5/2); moist (0% gravel, 5% sand, 95% fines).	
30						
31						
32					SAND with silt (SP-SM), VERY DARK BROWN (10YR 2/2); saturated (0% gravel, 90% sand, 10% fines).	
33						
34					SILTY CLAY (CL), VERY DARK GRAYISH BROWN (2.5Y 3/2); moist, iron oxide staining, medium plasticity and toughness by hand roll test (0% gravel, 0% sand, 100% fines).	
35						
36						
37						
38					End of boring at 37.5 feet bgs.	
39					Extraction well installed 4/25/2007.	
40						
41						
42						
43						
44						
45						
46						

Sample Graphics

 Hand Auger
 No Recovery

 Soil Sample for Physical Testing
 Core Recovery

ENVIRON

6001 Shellmound Street, Suite 700, Emeryville, CA 94608

Boring Number: **EW-7**

Contractor: **Gregg Drilling, Inc.**

Driller: **Sean Rakow**

Project Number: **03-11903E**

Drilling Method: **Hollow Stem Auger**

Location: **San Jose, California**

Rig Type: **CME 95 Hollow Stem Auger Drill Rig**

Project Name: **Hitachi GST**

Sampling Method: **Continuous Core by California Split Spoon**

Date(s): **4/25/2007**

Well Construction Details

Blank Casing (feet):	0 to 16	4-inch Sch. 40 PVC
Screen (feet):	16 to 36	0.020 Slot Sch. 40 PVC
Annular Fill (feet):	0 to 2	Concrete
	2 to 12	Bentonite Grout
	12 to 14	Bentonite Pellets
	14 to 36.5	Monterey Sand # 3

Logged By: **N. Markman**

Checked By: **R. Russell**

GS Elevation: **189.250 ft. MSL**

Northing: **1914344.24**

Easting: **6182496.33**

Total Depth: **36.5 feet**

Borehole Dia.: **10 inches**

Depth (ft)	Core Interval	Soil Sample Interval	Soil Sample I.D. Number	Graphic Log	Material Description	Well Construction
1					GRAVEL (FILL) CLAYEY SILT with sand (ML), DARK YELLOWISH BROWN (10YR 4/4); moist, very fine sand (0% gravel, 20% sand, 80% fines).	
2						
3						
4						
5						
6						
7					SANDY SILT (ML), DARK YELLOWISH BROWN (10YR 3/6); moist, very fine to fine sand (0% gravel, 30% sand, 70% fines).	
8						
9						
10						
11					CLAY with silt (CL), OLIVE BROWN (2.5Y 4/4); moist, low plasticity with medium toughness by hand roll test, trace gravel/hard nodules (0% gravel, 10% sand, 90% fines).	
12						
13						
14						
15						
16						
17					CLAYEY SILT (ML), moist, very fine to fine sand, variegated coloring (0% gravel, 10% sand, 90% fines).	
18						
19						

Sample Graphics

 Hand Auger

 No Recovery

 Core Recovery